A Visit to Kinabalu Park

by

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Part 2

Wednesday: A trip outside the Park, and to Masilau

Today's schedule was to include some exploration outside Kinabalu Park, as well as a hike to Masilau (which is part of the Park) where we expected to find *N. rajah* in its natural habitat. We packed up the jalopy and drove off. The drive was slow but gorgeous as we wound along the mountain roads through small villages, down into one valley and up the other side. We pulled off the road at the top of a grassy hill near the village of Bundu Tuhan; from here on we would be hiking. This was a fairly short hike which took us through chest-high grass, past some small tomato farms and to a steep embankment that bordered a creek. Here we found several specimens of *N. gracilis*. Some were fairly mature plants which were climbing through bushes, and others were very young rosettes growing close to the ground. The pitchers had more red mottling than I have seen in photographs of *N. gracilis*.

We continued down the embankment and across the creek, through another grassy field and finally we ended up near some old shacks that appeared to be abandoned. Behind the shacks was a grassy knoll which we began to climb. There was no trail, so the guide had to cut one with his machete. I found out that it was extremely important for me to follow his exact footsteps, since once I strayed a bit to the right and almost fell off a 2 m ridge; the grass was so high it was impossible for me to determine the actual topography of the hill. We crested the knoll and began walking downward to another creek. Here we found *N. reinwardtiana*, the green form. It was a fairly large plant that had grown extensively through the saplings which bordered the creek. The pitchers had the two distinctive "eyes" on the back wall. There were the remnants of two other large *N. reinwardtiana* vines in nearby saplings; both vines had been dead for some time. Apparently the property owners perform a periodic "slash and burn" on the hillside, and the two Nepenthes fell victim to this practice.



Fig. 1 -- The author's bedraggled Thai friend holds a *Nepenthes rajah* pitcher. Photo by Perry Malouf.

After taking a few pictures, we made our way back to the jalopy and drove toward Masilau. I understand that the area around Masilau used to be included in Kinabalu Park, and was later released so that a resort could be built. A golf course exists now where untouched forest used to be. Not all of the land was taken by the golf course; the areas which border the Park were made available to lumber companies. We had to drive through a shallow stream and over some deeply trenched logging roads to arrive in this area. The skies had become

overcast and we expected rain any minute. We parked the jalopy and walked about 1 km up the logging road to the edge of the forest. Our intention was to simply walk straight up the forested hillside, and that is exactly what we did. The trail was nothing like the summit trail we had hiked the day before. Instead, this was a poachers' trail and was barely discernable. The forest was very dense and lush. Though it had not started to rain yet, everything was dripping wet.

Orchids were everywhere, but few were in bloom. Moss grew in thick wads on the tree trunks, and I discovered that this was quite useful for washing my hands—the moss was like a water-soaked sponge. All I had to do was grab a moss-covered sapling and squeeze, and my hand came away clean. After 1 km or so we saw dead vines of *N. burbidgeae*. They had grown to be quite large plants, and I had no idea what killed them. The vines were still anchored in the ground, and had clambered about 7 m through the trees. Our guide did a little exploring off the poachers' trail and found one *N. burbidgeae* which still had a living tip. There were several aerial pitchers on it, each about 10 cm high, dull yellow and covered with red blotches. It was a beautiful plant, and I wished that I could have found one that was not dying.

Farther up the hill we arrived at a small clearing. Two trees in the clearing had red spray paint marks on them which signified that we were entering the Park boundary. We hiked about 1/2 km up the hill from the clearing, and finally found *N. rajah*. There were three plants growing within 5 m of one another, and though they were larger than the ones I saw in the mountain garden they still were not fully grown. The largest pitcher was about the size of an American football, and had an orifice of almost 15 cm in the long dimension. Inside one pitcher we found some frog eggs. Our guide mentioned that larger plants might be found higher up, but I was much too tired to continue upward. We still had a long and tricky hike back down the hillside, and I opted to return to the jalopy rather than search for more *N. rajah*.



Fig. 2 -- *N. villosa* pitcher. Photo by Perry Malouf.



Fig. 3 -- *N. lowii* pitcher. Photo by Perry Malouf.

On the way down it started to rain, so my friend and I donned our panchos. It rained hard, and our guide was concerned that the stream we had driven through might not be passable now. I was too tired and uncomfortable to think about such things—I was dirty, my shirt was soaked with perspiration, my glasses had fogged up to the point of being useless (I removed them), and I was slipping on the wet trunks of fallen trees. After what seemed like an eternity we broke free of the forest and walked down the logging road back to the jalopy. I did not remember having traveled so far on the way in! Fortunately for us, the stream was passable and we made it back to the Park by around 4:30 p.m. Our guide suggested that we meet at 9 a.m. the next morning, and then departed.

Thursday: Trip to "White Sand" village, and a glimpse of Rafflesia

Today my Thai friend was suffering from hike-induced muscle aches, so he decided to stay behind. After a hearty breakfast, I met our guide in front of the Old Administration building at the appointed time. Today we were going to visit a small village outside of Kinabalu Park called Pasir Putih, which translates to "White Sand". It took us about 45 minutes to drive there at the slow jalopy speed, and again the drive was filled with beautiful mountain scenery. We passed many mountain-side farms featuring vegetables like broccoli, cabbage, and hot chili peppers. One area had several structures that looked like greenhouses, except glass panels were replaced by black cloth. This was a mushroom farm, and the structures provided the perfect growing conditions—dark, warm, and moist. Many of these farms are owned by Chinese but are tended by immigrant Indonesian workers.

We arrived in the village of "White Sand", and drove by several groves of cacao, betel nut, and durian trees. My guide saw an elderly gentleman walking along the road and asked him where we might find "periuk kera", the monkey's cup plant (Nepenthes). The gentleman said that he could take us to some, so I let him have my seat in the jalopy and I climbed into the back of the flatbed. We drove along the road for another kilometer and parked at the gate of a farmhouse. The gentleman led us onto the property, past the house and into some fields where we began following a cattle trail.

Immediately I could see why this village is called "White Sand", because that is exactly what we were walking on. In places where the few centimeters of topsoil were washed away, there was nothing but clean, fine white sand. On either side of the cattle trail, growing in the topsoil, were several plants of *N. gracilis*. These appeared like those we had seen the day before, only the plants were larger and had clambered farther through the tall grass and saplings. Pitchers measured about 10 cm high at the most, and were a light green with plenty of red mottling. We continued onward, over a wobbly cable suspension bridge that crossed a creek, and into a wide grassy plain. Here there were more *N. gracilis* plants, about one every 10 meters on either side of the sandy trail. I found this natural growth of N. gracilis to be very attractive. The plants wound their way upward through the tall grass, securing themselves by coiling tendrils around twigs and branches, and these tendrils produced pitchers which hung from the twigs in clumps of two or three together. There were also a few young plants growing as small rosettes in places where the grass was somewhat sparse.

These were the only Nepenthes I saw that day. With the time we had left (most of the afternoon), my guide offered to take me where we might find some Rafflesia. Although I was interested mostly in Nepenthes, the possibility of encountering the rare Rafflesia was quite tempting, so I agreed. For those who do not know about

Rafflesia, I will mention the few facts I learned about it. Rafflesia is the largest flower in the world and has no stems or leaves but grows directly out of the ground. It has five fleshy petals, can grow to about 1 m in diameter, is usually orange-red in color, and has a stench of carrion. It is a parasite and grows on the roots of a certain wild shrub. The seeds need to be trampled into the earth by some large animal (e.g. a deer) near the roots of its host in order to germinate. On the rare occasion that Rafflesia is found, botanists flock to the area. If the flower blooms on private property, the lucky owners make some money by charging admission to those who wish to see it—and most people are willing to pay the price because it is indeed a rare find.

We drove to another location outside of the park, near a village called Kauluan. After parking the jalopy we hiked through some vegetable farms, started along a trail through a forest, then diverted off into that thick forest. This was jungle trekking in its most demanding form. There was no trail, the growth was dense, and I did not have a machete (which is standard equipment around there—every outdoorsman carries one). Fortunately my guide had all the "standard equipment", and he hacked a meager trail for me to follow. I took a moment to look around; every direction seemed exactly the same. There was little light filtering through the treetops, I could not see the sun and there were no other points of reference. It must be easy for the inexperienced hiker to get lost in those woods! It was not raining, but just as before everything was dripping wet. After a 20 minute hike my guide found a patch of *Rafflesia pricei*. Unfortunately we were too late to catch one flower at its peak—it had already turned black but still retained its shape. Other flowers were almost completely rotted away. Very close by were some unopened Rafflesia buds, the largest of which (15 cm dia.) was about two weeks away from opening. It was shaped like an oblate spheroid, and the thin black membrane which wrapped it had separated along the top to reveal the enclosed light-orange immature petals.

Another half hour of walking brought us out of that forest and back toward the farms we had passed earlier. We boarded the jalopy and headed back toward the Park, where we arrived at around 4 p.m. The next day we would take a trip to Poring Hot Springs, another research station in the Park, and look for Nepenthes there. This time the Park head botanist would accompany us, and we would have the use of one of the Park's 4-wheel-drive vehicles.

Friday: Poring Hot Springs, *N. rajah* collecting, and our departure

Today my Thai friend felt better, and so both of us met our guide, the head botanist of the Park, and some other workers and we drove off. Before going to Poring Hot Springs, we had to drop off the other workers at one of the other field stations where they would go searching for some *N. rajah* plants. They were going to bring them back for use in an exhibit. Although the Park vehicle was more comfortable and refined than my guide's jalopy, the nasty construction road made for a very tough ride. I regretted having had breakfast, and I was holding tightly onto the vehicle's roll bar along the roof in an attempt to stabilize myself against the jostling. We made it to the field station, dropped off the workers, headed back down that terrible road, and proceeded to Poring Hot Springs.

Upon our arrival, the head botanist showed us around. There is a building under construction which will house some brand new tissue culture laboratories. Nearby are some open building frames where orchids are kept. There were many, many plants collected from various locations in the Park, some of which were in bloom. We departed

the orchid collection in time to see four deer stroll by the trail on their way to higher ground. They seemed abnormally tame—perhaps the Park employees feed them. There were no Nepenthes at the research station, but after leaving Poring Hot Springs we found some along the roadside. There were several *N. gracilis* plants similar to those we had seen in previous days. Nearby was a another rather large Nepenthes vine with pitchers that looked just like *N. mirabilis* var. *echinostoma*, a photo of which I had seen in Nature Malaysiana (vol. 13, no. 4, October 1988). Each pitcher was about 12 cm high and 2.5 cm in diameter, and the peristome was rather wide and formed a shelf all the way around the mouth of the pitcher. It was the peristome which suggested to me that this might be the var. *echinostoma*.

On the way back to the Park we had to pick up the workers who were dropped off before, and I asked if I might be spared the ride on that construction road. Amusingly, everyone else had the same idea. We all disembarked at a market place, and the driver went on to pick up the other workers. For a half hour we mulled about, and I was getting quite a few stares from children and some adolescents. I guess they do not see many tall Caucasians around there, and I tried to be on my best behavior so that the villagers would not get a bad impression.

Finally our vehicle came back to pick us up. In the back of the truck were two very large *N. rajah* plants in a bamboo basket, and one orchid which is endemic to Sabah (I think it was *Paphiopedilum volonteanum*). I noticed with some satisfaction that the triumphant workers' trousers were filthy from the thighs down, identical to my condition after hiking in Masilau to find *N. rajah*. One of the *N. rajah* plants had a male inflorescence, and both had sizable pitchers—one pitcher was 30 cm from tendril attachment to lid attachment, and the lid was almost as long again. These plants were brought inside the New Administration building, to be potted up for the exhibit.

We returned to the Park in the early afternoon, and my friend and I set about packing our belongings, settling accounts at the front office cabin, and buying last-minute souvenirs. We boarded one of the tour buses bound for Kota Kinabalu; these buses visit the Park every day. The bus stopped at a farmers' market along the way where wild honey, fruits, and some locally made souvenirs were being sold. After 10 minutes we were off again. It started to rain and continued through our arrival at the Hyatt hotel in Kota Kinabalu. We spent the night at the Hyatt, took a taxi to the airport the next morning, and flew out of enchanting Borneo—it was clear enough on that morning to see Mt. Kinabalu through the jet windows.

Epilogue

Reflecting upon this one week trip, I am overwhelmed by my experiences in the Park and surrounding area. All of my expectations had been fulfilled. I had seen and photographed Nepenthes: *rajah*, *villosa*, *kinabaluensis*, *fusca*, *edwardsiana*, *tentaculata*, *lowii*, *burbidgeae*, *gracilis*, *mirabilis* var. *echinostoma*, *reinwardtiana*, and one species I could not identify. Of these, only the *edwardsiana* and the unidentified species were not seen in their natural habitat (they were in the Mountain Garden). Also, I had a chance to see the rare Rafflesia flower (though it was past its peak), and I saw a lot of beautiful scenery. The Park staff were cheerful, friendly, very helpful and generous. If I am lucky I will have another chance to visit in my lifetime, hopefully while I am still able to endure the hikes.